

REMARKS/ARGUMENTS

Favorable reconsideration of this application in view of the above amendments and in light of the following discussion is respectfully requested.

Claims 1, 3-9 are pending. Claims 1, 3-5 are amended; Claim 2 is cancelled; and Claims 6-9 are added by way of the present Amendment. No new matter is introduced.<sup>1</sup>

In the outstanding Office Action, the Abstract was objected to as containing informalities; Claims 1-4 were also objected to as containing informalities; Claim 5 was objected to as being improper for being a multiple dependent claim dependent upon another multiple dependent claim; Claims 1-4 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite; Claims 1 and 4 were rejected under 35 U.S.C. § 102(e) as being anticipated by McGrew (U.S. Patent Application Publication No. 2003/0123051 A1, hereafter “McGrew”); and Claims 2 and 3 were objected to as depending upon rejected claims but otherwise indicated as allowable. The indication of allowable subject matter is acknowledged with appreciation.

In reply, the Abstract has been amended to adopt the Examiner’s suggestions, and to be consistent with accepted U.S. patent application formats. Also, Claims 1, 3, 4 have been amended to cure the identified informalities. Accordingly, it is respectfully requested that the objections to the Abstract and to Claims 1, 3, 4 be withdrawn.

Further, the outstanding Office Action objected to Claim 5 for being a multiple dependent claim that depends on another multiple dependent claim. Amended Claim 5 has been amended to eliminate its dependency on multiple claims, and is now in conformity with 37 C.F.R. § 1.75(c). Accordingly, it is respectfully requested that the objection to amended Claim 5 be withdrawn.

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<sup>1</sup> The amended claims and the added claims find support at least in the claims as originally filed, for example.

New Claims 7, 8 and 9 are also in condition for allowance for at least the same reasons as amended Claim 5, on which they directly or indirectly depend.

Next, Claims 1, 3, 4 have been amended to comply with the requirements of 35 U.S.C. § 112, second paragraph. Therefore, it is respectfully requested that the rejection of Claims 1, 3, 4 under 35 U.S.C. § 112, second paragraph, be withdrawn.

With respect to the rejection of Claim 1 under 35 U.S.C. § 102(e), amended Claim 1 recites, *inter alia*:

...a section configured to determine an amount of polarization rotation and a phase difference applied to a certain light pulse on the basis of a polarization measurement of the a preceding input light pulse sequence, thus realizing *a controlled-unitary transform configured to cause a phase difference between a polarization indicating a  $|0\rangle$  state and a polarization indicating a  $|1\rangle$  state.*  
(Emphasis added.)

Applicants note that the italicized portion above incorporates the limitations of cancelled Claim 2 into amended Claim 1, and that cancelled Claim 2 was indicated as containing allowable subject matter in the outstanding Office Action. Therefore, Applicants submit that amended Claim 1 is in condition for allowance, and respectfully request that the rejection of amended Claim 1 under 35 U.S.C. § 102(e) be withdrawn.

Applicants further submit that amended Claims 3, 4 and 6 are also in condition for allowance for at least the same reasons as amended Claim 1, on which they directly or indirectly depend.

No further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. Therefore, a Notice of Allowance for Claims 1, 3-9 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.


Respectfully submitted,

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